There are four basic steps to treating water. First, we add alum (aluminum sulfate) to water, speeding the removal of most dirt and other larger particulate matter. This step is known as "settling."

Once completed, water is filtered to remove smaller pieces of debris and bacteria. The water is chemically treated to kill any remaining bacteria.

Next, fluoride is added to protect teeth and chemicals to protect pipes are included. Federal, State, and local health laws require these additives during treatment. Then, water is stored. Finally, it is pumped into homes and businesses in High Point and the surrounding area.

Our commitment to you—The city of High Point has a state- and federally-certified testing program for your water that meets or exceeds all standards. The water is tested as it is being collected in the watershed, during the treatment process, and, also, after it is delivered to homes and businesses in our community. Those results are presented in this report.

Source Water Assessment—The N. C. Dept. of Environment and Natural Resources (DENR) has conducted a Source Water Assessment of our drinking water source. The purpose of the assessment was to determine the susceptibility of the drinking water source to potential contamination.

The assessment reported a susceptibility rating of "moderate" for both Oak Hollow Lake and High Point City Lake. This rating does not imply poor water quality; rather, it signifies the system's potential to become contaminated. The complete report may be viewed at www.dehenr.state.nc.us/pws/swap.

Questions about your water? Call the Customer Service Phone Center at 336.883.3111, 24 hours a day, seven days a week.

Important Health Information—Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U. S. EPA Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 880.426.4791.

Information on the Internet—The U. S. EPA Office of Water and the CDC web sites provide a substantial amount of information on many issues relating to water resources, water conservation and public health. Also, DNER has a web site that provides complete and current information on water issues in North Carolina, including valuable information about our watershed.

EPA: www.epa.gov/watrhome
CDC: www.cdc.gov
NC: www.ehnr.state.nc.us

CHANGES IN PROCESS

On July 25, 2011, the Ward Water Treatment Plant in High Point, and Greensboro, Piedmont Triad Regional Water Authority, Burlington and Reidsville changed their method of disinfection from free chlorine to a two-stage process. Primary disinfection is still achieved by free chlorine, but we are now using chloramines (combined chlorine and ammonia) as our secondary disinfectant. This change is to help us comply with the Stage 2 disinfectant/disinfectant by-products rule from EPA.

This information will be provided in an alternate format for people with visual impairments.

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336.883.3289 www.highpointnc.gov
June 2013

For Your Information

a newsletter from the City of High Point

Consumer Water Report

January - December 2012

Where does our water come from? High Point's water comes from a 62-sq. mile area known as a watershed.

We do not have any large river systems, such as the Yadkin or Neuse River, to rely on. As a matter of fact, we are the first to use water from the beginning, or headwaters, of a larger river system called the Cape Fear River.

Our water comes from rainfall and runoff in an area roughly bordered by U. S. Hwy. 421 on the north (above (I-40), Main Street on the southwest, N. C. Hwy. 66 on the west, Montlieu Ave. on the southeast, and Guilford College Rd. on the east.

The water collects in streams that flow together into what becomes the east and west forks of the Deep River. It is then collected and stored in our two lakes—Oak Hollow and City Lake. Before we can send the water to you, it needs to be treated to remove contaminants it has picked up on the way to our water supply lakes.

How does the water get to you? Most of the water we drink is pumped from City lake and processed into treated drinking water at the Ward Water Plant on Kivett Drive. We have a state-of-the-art treatment facility where we remove those contaminants water picks up as it is collected in our watershed.

HIGH POINT
NORTH CAROLINA'S INTERNATIONAL CITY™

SELECTED AVERAGE VALUES AFTER TREATMENT

(from monthly reports to N.C. Public Water Supply)

Ward Water Plant (Jan-Dec 2012) **PTRWA Plant (Jan-Dec 2012)**

Constituent	Average found	Most found	Average found	Most found
Turbidity (NTU)	0.061	0.184	0.069	0.115
Total Organic Carbon (mg/L)	1.63	1.80	2.52	2.73
Dissolved Organic Carbon (mg/L)	0	0	2.42	2.91
UV 254(m-1)	4.80	4.80	4.00	4.80
pH (std units)	8.32	8.80	8.13	8.36
Chlorine (mg/L) (Total)	3.46	3.80	3.37	3.53
Alkalinity (mg/L)	26	35	40.2	49.1
Hardness (mg/L)	33	39	35.8	39.4
Fluoride (mg/L)	0.56	0.79	0.08	0.09
Iron (mg/L)	<.06	<.06	<.06	<.06
Manganese (mg/L)	<.008	<.008	<0.01	<0.01
Sodium (mg/L)	14.50	14.50	32.9	32.9
Nitrate+Nitrate as Nitrogen (mg/L)	0.22	0.40	<0.10	<3.0
Total Phosphorus as Phosphorus (mg/L)	0.18	0.23	1.52	2.63
Total Coliform (/100ml)	<1.0	1	<1.0	<1.0
Heterotrophic bacteria (/ml)	28	738	4	4
Aeromonas (bacteria) (/100ml)	<.20	<.20	not tested	

Definitions

NTU - turbidity units, used only to define this measerment

mg/L - milligrams per liter or parts per million (ppm)

pCi/L - picocurries per liter, used only for radioactivity measurements

< - less than

> - greater than, both ara applied to numbers to indicate a bounty such as, "The number should not exceed" or "The value cannot be measured below this number"

MCL - (Maximum Contaminant Level) the greatest amount allowed in your water by law that determines whether it is safe or not.

MCLG - (Maximum Contaminant Level Goal) This would be the ideal situation. This may or may not exist anywhere on earth, but it is the best we wish we could achieve.

MFL - measurable fiber length.

Heterotrophic - a group of bacteria that is a general indicator of many bacteria but are not health threating.

Coliform - a group of very resistant bacteria usually associated with disease.

Required Safe Drinking Water Act Regulated Constituents Tested or Detected - January - December 2012

	After treatment Ward Water Plant		After Treatment at the PTRWA plant					
Constituent	**Last found**	**Last tested**	**Last found**	**Last tested**	**MCL(1)**	**MCLG(2)**	**Potential Health Effect**	**Source**
pH (std units)	7.88	12/12/2012	8.05	12/1/2012	>6.5	no limit	none	none
Arsenic (mg/L)	<0.005	12/12/2012	<0.005	12/01/12	0	0.01	Circulatory effects, increased cancer risk	
Barium (mg/L)	<0.400	12/12/2012	<0.040	12/01/12	<2	<2	Circulatory effects	natural pigments, epoxy sealants, spent coal
Fluoride (mg/L)	0.5	12/12/2012	0.135	12/01/12	<4	<4	Skeletal and dental fluorsis	natural, fertilizer, aluminum industry, water treatment
Sodium (mg/L)	14.5	12/12/2012	32.9	12/01/12	no limit	no limit	none	none
Sulfate (mg/L)	22	12/12/2012	31.6	12/01/12	no limit	no limit	diarrhea	natural deposits, water production
Nitrate (mg/L)	<1.00	10/2/2012	<1.00	12/01/12	<10	no limit	methemoblobulinemia	animal waste, fertilizer, natural deposits, septic tanks, sewage
Nitrite (mg/L)	<0.10	10/2/2012	<0.10	12/01/12	no limit	no limit		
Gross alpha (pCi/L)	<3	12/12/2006	<3	01/01/11	15	none	cancer	natural deposits and man-made sources
Gross beta (pCi/L)	<4	12/12/2006	no data		50	none		
Radium 228 (pCi/L)	<1	12/12/2006	<1	10/01/10	2	none		
Total Asbestos (MFL>10um)	<0.20	2003	no data		7	none	cancer	
Total Coliform (/100ml)			<1	1/1/2011	<5% of tests	none	stomach upset	human and animal waste
Total Trihalomethanes (rolling average of previous 4 quarters) (mg/L)	0.0431	8/16/2012	no data	no data	< 0.080	no limit	cancer, suspected in pre-mature birth	by-product of dissinfecting drinking water
Total Haloacetic Acids Rolling average of previous 4 quarters) (mg/L)	0.035	8/16/2012	no data	no data	< 0.060	no limit		
Lead (ug/L) from 30 samples to 100 samples	<0.003	7/6/2012	no data	no data	<15	<15	kidney, nervous system damage	natural/industrial deposits,plumbing,solder, brass alloy faucets
Copper (ug/L) from 30 samples to 100 samples	<0.072	7/6/2012	no data	no data	<1300	<1300	gastrointestinal irritation	natural/industrial deposits, wood preservatives,plumbing

Pesticides and Synthetic Organic Chemicals (SOC's) 39 compounds tested with no quantifiable results to report. Sampled on 12/12/2012.
Volatile Organic Chemicals (VOC's) 21 compounds were sampled on 12/12/2012 and had no quantifiable results to report.

On October 4, 2010, the City of High Point started purchasing 2.28 MG of water from Piedmont Triad Regional Water Authority (PTRWA). Test results are listed.
Pesticides and Synthetic Organic Chemicals (SOC's) 39 compounds tested with no quantifiable results to report. Sampled on 1/1/2012.
Volatile Organic Chemicals (VOC's) 21 compounds were sampled on 1/1/2012 and had no quantifiable results to report.

On July 25, 2011 the City of High Point changed it's Secondary disinfection to Chloramines (combined chlorine and ammonia). Primary disinfection is still free chlorine.